Predicting Enlistment Propensity of Young African Americans

Anne O. Hughes, Daryao S. Khatri, Beth N. Ausbrooks, Elizabeth Sims, Troy Mitchell, and William Shanklin University of the District of Columbia

Research and Advanced Concepts Office Michael Drillings, Chief

January 2000

U.S. Army Research Institute for the Behavioral and Social Sciences

Approved for public release; distribution is unlimited.

20000118 098

U.S. Army Research Institute for the Behavioral and Social Sciences

A Directorate of the U.S. Total Army Personnel Command

EDGAR M. JOHNSON Director

Research accomplished under contract for the Department of the Army

University of the District of Columbia

Technical review by

Tony Papa

NOTICES

DISTRIBUTION: This Research Note has been cleared for release to the Defense Technical Information Center (DTIC) to comply with regulatory requirements. It has been given no primary distribution other than to DTIC and will be available only through DTIC or the National Technical Information Service (NTIS).

FINAL DISPOSITION: This Research Note may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The views, opinions, and findings in this Research Note are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision unless so designated by other authorized documents.

REPORT DOCUMENTATION PAGE								
1. REPORT DATE January 20		2. REPORT T Final	YPE	3. DATES COVER 8/11/95 – 8/11/9	The state of the s			
4. TITLE AND SU	BTITLE			5a. CONTRACT OR GRANT NUMBER				
Predicting Enli	stment Propensi	ty of Young Afr	DASW01-95-K-0011					
			5b. PROGRAM ELEMENT NUMBER 0601102A					
6. AUTHOR(S)			5c. PROJECT NUMBER					
Anne Hughes,	Daryao Khatri, I	Beth Ausbrooks,	20161102B					
Troy Mitchell, of Columbia)	& William Shar	ıklin (University	of the District	5d. TASK NUMBER 1901	٦			
				5e. WORK UNIT N C28	UMBER			
Scientific Paralle		ed Research Cente	8. PERFORMING ORGANIZATION REPORT NUMBER					
	MONITORING AGE			10. MONITOR ACI	RONYM			
5001 Eisenhowe		he Behavioral and	Social Sciences	ARI				
Alexandria, VA	22333-5600			11. MONITOR REI	PORT NUMBER			
	***			Research Not	te 2000 – 05			
12. DISTRIBUTIO	N/AVAILABILITY ST	ATEMENT						
Approved for pu	blic release; distrib	oution is unlimited.						
13. SUPPLEMENT	TARY NOTES							
14. ABSTRACT (I	Maximum 200 words	·):						
Developed and	tested a structura	al model to predi	ct enlistment prope	nsity of young At	frican Americans ages 16-19.			
15. SUBJECT TE Enlistment Propen	RMS sity Enlistment F	Predicting Enlistmen	t Recruiting Recruitr	nent				
SECI	JRITY CLASSIFICA	TION OF	19. LIMITATION OF	20. NUMBER	21. RESPONSIBLE PERSON			
16. REPORT Unclassified	17. ABSTRACT Unclassified	18. THIS PAGE Unclassified	ABSTRACT Unlimited	OF PAGES 47	(Name and Telephone Number)			

PREDICTING ENLISTMENT PROPENSITY OF YOUNG AFRICAN AMERICANS

FINAL REPORT

Submitted to

Dr. Michael Drillings and Dr. M. A. Fischl Army Research Institute 5001 Eisenhower Avenue Alexandria, Virginia 22333-5600

SFRC Number: DASW01-95-k-0011 Grant Number: W7300B-5097-5579 Contract Dates: 08/11/95 - 08/11/98

prepared by

Dr. Anne O. Hughes, Principal Investigator
Dr. Daryao S. Khatri, Co-principal Investigator and Project Director
Dr. Beth N. Ausbrooks, Community Specialist
Ms. Elizabeth Sims, Mr. Troy Mitchell and Mr. William Shanklin, Research Assistants

Scientific Parallel Processing Applied Research Center University of the District of Columbia

February 22, 1999

Table of Contents

Executive Summary
Purpose
Method
Findings i
Discussion of Findings and Recommendations
Background Page 1
Purpose
Methodology Page 6
Definition of Terms
Results Page 7
Part 1: Theory and Results of the Logistic Regression Model Page 8
Part 2: Descriptive Findings Derived from Summary Statistics
Summary of Results and Discussion
Recommendations

EXECUTIVE SUMMARY

Purpose

This three-year research study was designed to develop and test a structural model to predict enlistment propensity of young African American males and females, ages 16-19 years. The final report presents two sets of findings derived from a survey of 460 African Americans in the District of Columbia public senior high schools during Spring Semester 1996. The findings are: predictive findings that employed logistic regression and comprehensive descriptive findings based on summary statistics. The school catchment areas have been used as the measure of socioeconomic status (SES).

For this study, it should be understood that the prediction of propensity to enlist is the reported favorable attitude to enlisting in a military service by a respondent. A long-term longitudinal study would be required to ascertain the relationship between a reported favorable attitude to enlist on the part of an individual and the actual enlistment of that individual.

Method

The research study made use of: (1) a known interviewer of the same ethnicity; (2) face-to-face, individual interviews; (3) a short and personalized instrument; (4) a method which telescoped typical decision making behavior extending over a six month to a two year period into a ten-minute interview; (5) a determination of socioeconomic status by high school catchment area; and (6) a logistic regression model for predicting the enlistment propensity of young African American males and females based on three probable decision points (dependent variables).

The instrument was designed to divide the overall sample into three groups who were used to simulate the decisions that a typical African American high school student probably would have to make over a two-year period, immediately following high school graduation. Group I consisted of those respondents who have already decided to join the military (*Decision 1*, unaided propensity, first dependent variable, Item 19). Group II was composed of respondents who said that they would join the military if their first choice, typically going to college, does not work out (*Decision 2*, also unaided propensity, second dependent variable, Item 25). Group III was made up of those respondents who said they would join the military if Choices 1 and 2 do not work out and the benefits resulting from military service are clearly explained (*Decision 3*, aided propensity, third dependent variable, Item 28).

Findings

Two sets of findings are presented for this study. The first set is based on the results of the statistical logistic regression model. The second set consists of descriptive findings derived from summary statistics.

Predictive Findings Based on Logistic Regression Statistical Model

For this study, the propensity to enlist is measured by three items on the instrument (the three dependent variables). The first choice consisted of Item 19, "What do you think you might be doing [after high school]", and dealt with unaided propensity. Choice 2 consisted of Item 25 on the instrument, "What will you do if the first choice doesn't work out?", also unaided propensity. The third and the last choice, aided propensity, was provided by Item 28, "With these benefits waiting for you, would you consider joining a military service", in the instrument. All other items in this study were treated as potential predictor (independent) variables. Logistic regression was used because the data for the three dependent variables were nominal (in categories). The statistical results using logistic regression are shown in Tables LR-1 through LR-6.

Overall, our results show that the model can predict an inclination to enlist (enlistment propensity) ranging from 70 to 100% probability for <u>individual</u> schools depending upon the SES of the respondents as shown by school. However, for each of three dependent variables when the total group (all schools) for that variable was included in the analyses, the probable inclinations ranged from 90 to 100% based upon the predictor variables used. For the total group at each decision point, the probabilities of the chi-squares occurring by chance were all less than .0001. However, the significance level of chi-squares for each individual school ranged from probability of <.001 to < .0001, meaning that these results occurring by chance are extremely rare. The degrees of freedom varied as well, ranging from 4 df to 9 df depending upon the number of predictor variables used.

Some general conclusions based on the logistic regression analysis are:

- 1. African American propensity/inclination to enlist in the military can be predicted with a probability ranging from .90 to 1.00, at several decision points when SES is taken into account.
- 2. The most important predictor is the education benefit after service. This predictor was consistently present across all three groups and across all SES levels. Other benefits associated with military service, such as travel and adventure, are important predictors, but their actual weights could not be clearly determined for all groups.
- 3. The presence of a "well functioning" ROTC makes a difference, as illustrated by its value as a predictor at Coolidge High School (CHS) for all three groups. However, at Anacostia

- High School (AHS), ROTC was not an important predictor variable.
- 4. Our idea of "Latent good will" proved to be an important predictor for the low SES population in the first decision, and it was important for the low-middle SES at the second and third decision points.
- 5. The TV advertisements did not appear as a predictor variable for any SES group at any of the three decision points.

Descriptive Results and Discussion

- 1. <u>Gender</u>.--For Group I (unaided propensity) and Group III (aided propensity), the respondents are almost equally divided by gender, and virtually all of them were single.
- 2. <u>Socioeconomic Status.</u>—For each of the three groups, almost two-thirds of the students who will join the military at any one of the three decision points come from the lower socioeconomic status as defined for this study. The number of <u>middle socioeconomic status</u> students who are likely to enlist in the military, even as a third choice when the benefits are clearly understood, is very small. Moreover, these students apparently believe that they still have other more desirable choices open to them than enlisting in a military service even after being "unsuccessful" in terms of their first two choices. SES is a major predictor in the logistic regression model.
- 3. <u>Telescoping Effect.</u>—The Choice 1 findings (unaided propensity) in this study parallel those of other earlier studies. Where the findings of the present study differ from those of earlier studies is in the findings for Choice 2 (unaided propensity) when the first choice does not work out and Choice 3 (aided propensity) when neither the first choice nor the second choice is realized. None of the previous studies by other authors went beyond the first choice. When Choices 2 and 3 are taken into consideration, the results show that up to 61% of this particular sample is likely to join the military <u>if</u> the approaches used for recruiting them take the telescoping effect simulated in the interview into account.
- 4. <u>Latent Good Will.</u>—The entire sample (N=460) did not spontaneously verbalize the possible negative responses (shown in Matrix 1 of the interview schedule) as reasons for <u>not</u> joining the military when asked for their first career preference after graduating from high school (Choice 1). That virtually no respondent said anything that would fit with these items suggests a pervasive or latent goodwill toward the military. A similar pattern emerged when the respondents were directly asked about the Army as an Equal Opportunity Employer (Item 29). This finding is reinforced in the logistic regression model when Item 29 is used as a predictor.
- 5. <u>Personal Living Arrangements</u>.--Approximately one-third of the respondents live with their mothers, another one-third with both parents, and the remainder typically live with a mix of relatives.

- 6. <u>Education of Parents</u>.--For all three groups, the education levels of the fathers and mothers are almost the same. Neither parent's education level emerged as an important variable for any of the three groups in the descriptive findings. However, for Choice I, mother's education is an important predictor in the logistic regression model.
- 7. Participation in ROTC.--Those respondents who select the military as their first choice (Group I) also have a much greater participation in ROTC than do the respondents who chose the military as either their second or third choices. These respondents clearly know the benefits they will receive both while in service and afterwards. In the logistic regression model, ROTC at Coolidge High School (CHS) was an important predictor variable, but at Anacostia High School (AHS) it was not.
- 8. <u>Relatives with Military Service</u>.—Groups I, II and III are almost identical in terms of percents of relatives who have been in a military service. However, Group I has a greater percent of relatives currently serving than either Groups II or III. Group III has the lowest percent. Almost 100% of the three groups of respondents have relatives who either have served or are serving in the military; the vast majority of whom are males. That relatives who had served or are serving in the military has virtually no predictive value is a finding that needs further investigation.
- 9. Reaction to Military Advertisements. -- Virtually all of the respondents (N=460) report seeing the recruitment ads for the military when directly questioned about them. In addition, more than two-thirds of the respondents, again when directly questioned, noted that the ads had caught their attention. These findings are in marked contrast to the findings about the impact of ads in Matrix 1, where all of the respondents had the opportunity spontaneously to mention the influence of the ads in either a positive or a negative way. However, in Matrix 1, 99% of the respondents did not spontaneously mention the media or the ads as having any impact on their decision-making for either enlisting or not enlisting in the military. This finding was borne out in the logistic regression analyses as well.
- 10. <u>Unsolicited reasons for selecting the military as first or second choice (unaided propensity).</u>—For Groups I and II, one major theme, educational benefits, emerges from the spontaneous (unsolicited) reasons for joining the military. More specifically, educational benefits, both while in service and after leaving the service, are the most critical elements in the decision-making processes of these two groups of respondents. This theme proved to be one of the most powerful predictor variable.
- 11. <u>Aided propensity</u>.—The last phase of the telescoping of the decision-making process occurs when Choices 1 and 2 have not worked out. Now, someone the respondent trusts (the interviewer by this time) <u>orally</u> explains to the respondent all of the benefits that the military services offer.

After engaging in the conversation about the benefits, the interviewer comments that only through joining a military service, like the Army, can one receive all the benefits. The interviewer then asks which of the benefits are most attractive to the particular respondent.

As with the other two groups, the benefit selected by almost 80% of Group III is the college education benefit. Almost as important were travel, free medical and dental insurance, and the free housing. As can be seen, all of these benefits are related to the immediate economic situation (short-term) of individual respondents, and over time will improve life opportunities (long-term). The importance of the educational benefits in connection with several others proved to be important predictors in the logistic model as well.

Group III respondents initially did <u>not</u> know about the available benefits. In fact, many of the respondents, upon hearing about the benefits from the interviewers, spontaneously commented, "You gotta be kidding!"

13. <u>Respondent Attitude</u>.--Upon the completion of an interview with a particular respondent, the interviewer recorded his or her impression of that respondent to the interview. The instrument used a five-point Likert scale ranging from very receptive to not receptive at all. The percents shown in Table 14 are taken from the most receptive rating, indicating respondents' enthusiasm in participating in the interview. This receptivity is an indirect measure of the candor of their responses and the skill of the interviewers.

Discussion of Findings and Recommendations

- Promising target population for recruitment by the military.—The most promising groups of young African Americans for enlisting in the military service are from the lower socioeconomic status (SES). The military needs to recognize that this pool of young people is likely to be the largest source of recruits. In other words, the military needs to accept this reality, recruit them with whatever skills they do have, and shape their behaviors after they have enlisted. This point was made by Army Secretary Louis Caldera on February 17, 1999 almost a year after our second year report was submitted.
- Potential recruiters.—The military should make a concerted effort to expand the pool of potential recruiters to include: (1) relatives who have served in the military and who now are living in the community, and (2) high school counselors and other relevant school personnel in the lower SES areas. In the case of counselors and other school personnel, they need to be trained in:
 - o the comparative benefits of all viable options after high school graduation for graduating high school seniors

o all of the benefits that are waiting for the graduates as a result of enlistment in a military service. At the present time, the counselors, in particular, are focusing on college or some other postsecondary education option.

For this training of counselors to be successful, a team with a full knowledge of the school system, the target population, the personnel involved and actual teaching experience with this population will be absolutely essential.

In the case of veterans now living in the community, extensive training may not be necessary. Instead, only short seminars may be needed where the veteran's importance to the whole recruitment process both during the high school and after graduation from high school would be discussed.

- <u>Recruitment locations by time frame</u>.--The military should expand its recruitment effort to include locations where students and recent high school graduates congregate:
 - Recreation centers
 - Unemployment offices
 - O Public minority institutions with open enrollment policies and community colleges These locations are recommended because a large number of lower SES students can be found at them; and they congregate at these places for mutual support. Also, for these young people, the decision-making for the future is often indefinite because their plans are not realistically thought through. The high attrition rate (around 80%) of minority students in higher education institutions bear this out.
- Advertising material.—At least some of the advertising brochures should be rewritten to address the reality of this population. Written presentations and sentence structures designed for the middle class will not communicate the benefits from enlisting in a military service to a population that essentially secures its information in short sound bytes and by word of mouth. In addition, a new theme for the Army slogan should be considered that emphasizes economic and educational benefits in the short term and improving one's own life opportunities in the long term. In this regard, we note that, the commission on veteran's benefits concurred with this recommendation. In its January 1999 report.
- Women's role in the Army.—In all three decision groups, women were almost equally represented, and there is little family support beyond the high school years. Based on our general knowledge of this population as well as the results of the present study, an in-depth study of women in this population should be carried out to investigate the possible approaches that the Army can use to attract these women to enlist.
- <u>Survey research techniques</u>.--The instrument, a face-to-face interview, with telescoping features,

used in this study should act as a guide for future work in this area.

PREDICTING ENLISTMENT PROPENSITY OF YOUNG AFRICAN AMERICANS

FINAL REPORT

Background

In regard to enlistment propensity for the military, the longitudinal series of studies entitled the Youth Attitude Tracking Survey (YATS) has provided valuable information for the military services concerning the enlistment propensity of various age and ethnic groups by geographical region. In the most recent study of this series, a decline in positive enlistment propensity was reported for young males (Nieva, 1994). Included in this study were three ethnic groups: whites, Hispanics and African Americans. The decline covered the years from 1984 to 1992 which also encompassed the time period of Operations Desert Shield and Desert Storm.

The declines noted by Nieva (1994) were also reiterated by Sollner (undated) for the youngest age group (16-18 year-Olds) identified. In addition, the YATS study showed a particularly marked decline in the positive enlistment propensity of young African American males when the three ethnic groups are separately examined. The size of the African American male sample reporting was not clear, and there were no findings reported for young African American females.

In contrast, a study by Asch and Orvis (1994) for the Rand Corporation reported that "our analysis indicates that the actual decline in propensity for the prime recruiting market is much smaller than the propensity decline reported in earlier YATS publications" (p.11). Asch and Orvis offered two reasons for this finding. One reason focused on the differences between the estimates for "high quality" youth (upper half of the AFQT and generally graduating from high school) and "lower quality" youth, with the positive enlistment propensity apparently declining more for the "lower quality" youth than for the "high quality" youth.

The other reason had to do with the sampling strategies used for the YATS, beginning in 1991, in which reinterviewees were involved for the first time along with first-time interviewees. The reinterviewees were found to express "significantly lower propensity than first-time interviewees" (Asch and Orvis, 1994, pp.11 -12). These investigators concluded from their reanalysis that a substantial portion of the reported decline in positive enlistment propensity could probably be attributed to the reinterviewees in the sample. Moreover, they suggested that an adequate potential supply of high quality enlistees is likely to exist (p. 15).

Underscoring the "very strong relationship between [positive] intention level and enlistment",

Asch and Orvis additionally pointed out the significance of the "negative intention group". Specifically, they noted that although only a few of these individuals actually enlist, the "large size (72% of the males reporting) of the group enables it to account for about half of all enlistees (42%) " (p. 13).

Hughes and Khatri (1994) also examined factors related to a possible decline in positive enlistment propensity of young African American males and females, using a small sample (N=100). These investigators drew several conclusions from their findings. First, they reported that a decline in positive enlistment propensity could possibly be an artifact, a similar conclusion to the one drawn by Asch and Orvis (1994).

Second, almost 80% of the respondents did not seem to see the connection between military service and the educational opportunities that the military services can provide <u>during</u> an enlistment. Instead, they tended to see educational benefits coming <u>after</u> they would complete their military service. Moreover, most did not appear to see that saleable occupations for civilian life could be learned during their military service (Hughes & Khatri, 1994, p. 2).

Third, the respondents appeared to be indirectly expressing a latent goodwill towards the Army. This conclusion was based on both the presence and absence of certain kinds of information. With regard to "presence", almost half of the respondents reported having considered the Army as an option and having relatives in the military service, in particular, the Army. With regard to "absence", no expressions of discrimination in assignments, education and training opportunities were stated, and almost no references to physical danger were suggested. Also, as a final point with regard to the latent goodwill in the African American community, the Army traditionally has afforded African Americans–particularly males--excellent opportunities for upward mobility and prestige in their careers.

In aggregate, a careful examination of available research reports and documents reveals that both insufficient and differing information exists with regard to the positive enlistment propensity of young African Americans, ages 16 to 19 years old. Based on the literature cited here, several issues can be raised. First, is the reported decline in positive enlistment propensity that has been reported for the African American youth an artifact as implied by Hughes and Khatri (1994), a reality as reported by Nieva (1994), or a function of a methodological technique as suggested by Asch and Orvis (1994), or something else altogether?

Second, are the advantages offered by the military services both during and after enlistment clearly understood by African American youths who initially are expressing preferences for other choices after high school graduation? Third, what causes the change from the "initial expression of negative intention" to a subsequent enlistment? Somehow, the circumstances change and whatever the first--and preferred--choice was does not work out. Can the changes in the circumstances be identified and then

simulated? Can persons who also may have contributed to this change in decision-making be identified in terms of their importance? The investigators theorized that it could be done.

Finally, is there any relationship between the concept of latent goodwill introduced by Hughes and Khatri (1994) and the initial expressions of negative intention of Asch and Orvis (1994)? The proposed simulations can be used to test for a positive relationship.

These questions have been addressed through the variables that have been identified for the study (Table M-1) and will subsequently be refined for the development of the structural model.

The abbreviations shown in the column headings for Table M-1 are defined, as follows: (1) SES--socioeconomic status; (2) LGP--latent goodwill perception; (3) SCC--simulated conditional choice; and (4) IA--individual attributes.

Note:

For this study, it should be understood that the prediction of propensity to enlist is the reported favorable attitude to enlisting in a military service by a respondent. A long-term longitudinal study would be required to ascertain the relationship between a reported favorable attitude to enlist on the part of an individual and the actual enlistment of that individual.

Table M-1. Initially Proposed SES, LGP, SCC, and IA variables for structured model for enlistment propensity of young African Americans

Relatives in the military: parent(s), siblings, uncle(s)/aunt(s), etc. and their influence
Friends in the military: girlfriend, boyfriend, etc., and their influence
Presence/absence of discrimination in: assignments, promotions, training sites, enlistment, job opportunities, training, etc.
Physical security, e.g., lack of life-threatening "danger", provision of basic necessities of life
Psychological security of a clearly defined reference group with known expectations and outcomes
Outcomes while in service, e. g., education, job training
Outcomes after service, e.g., education, saleable jobs, marketable skills, etc.
Prestige before, during, and after service with peer groups and relatives
Time commitments, e.g., long-term unbreakable (enlistment) versus short-term breakable (education/employment) commitments

Purpose

In general, this research study is designed to develop and test a structural model to predict enlistment propensity of young African American males and females, ages 16-19 years. This final report presents comprehensive descriptive findings obtained from the survey of 460 African Americans in the District of Columbia public senior high schools during Spring Semester 1996. The school catchment areas have been used as the measure of socioeconomic status. The statistical model was multivariate logistic regression rather than multivariate linear regression.

For a survey study predicting enlistment propensity to be successful with young African Americans, ages 17-19, the following requirements must be met:

- 1. An interviewer with whom young African Americans are comfortable in talking to and interacting with is absolutely essential. A trained interviewer of the same ethnic background is preferable. Moreover, the interviewer must either be known to the young people or be introduced by someone who is known to them. Any other approach will fail to produce the candor that is so essential for gaining an accurate picture of this group. In this regard, an unknown telephone interviewer cannot establish the needed rapport with these young people.
- 2. A one-on-one, face-to-face situation must be employed. In group situations with young people of these ages, one or more participants often tend to influence the thinking of others despite the best efforts of the interviewer or group leader. Also, the more passive individuals simply tend to withdraw from any participation and by default just go along with their aggressive or more outspoken peers.
- 3. A short and directed data collection instrument is ideal. The instrument must allow for an informal dialogue or conversation in which the respondent is free to ask for clarification or repetition of a question, take whatever time is needed, and feels that he/she is valued as a person. Such an instrument also takes into account that African American youths, particularly those from the lower SES strata, generally rely on information that they receive word-of-mouth in terms of their own personal decision-making. Deep down, they do not trust the printed word.
- 4. The African American community is not monolithic in terms of social class and economic status.

 Rather, it parallels the majority society. Therefore, any sample which is used must take into

account the differing socioeconomic statuses of this population.

For this study, all of the requirements were met.

Methodology

- 1. The survey instrument was designed to be short and personalized in order to assure the full attention of this age group. If an interview goes on for more than 10 or so minutes, the typical respondent will become restless and will drift off the task.
- 2. The instrument design took into consideration three main aspects: (1) paralleling the probable decision-making behavior of these respondents, based on choices available; (2) applying a "reality check" for each of the decision points, and (3) telescoping this behavior into a very short time frame, i.e., ten minutes of interviewing time. That is, the probable decision-making behavior of the respondents was simulated by offering several real-life scenarios which typically take place over a six-month to two-year period after high school graduation in an individual's life. Each one of these successive scenarios required the respondent to make a decision based on the inability to realize the "preferred choice". This technique forced the respondent to make a choice. In effect, each scenario eliminated a preferred choice and reduced the number of options available.
- 3. Three pilot studies were carried out to assure the instrument's appropriateness for the target population.

Definition of Terms

- 1. <u>Enlistment Propensity</u>.--The inclination expressed by an individual to enlist in a military service or join ROTC after high school.
- 2. <u>Unaided Propensity.</u>—Non-prompted inclination expressed by an individual to join the military during an eighteen month period after graduating from high school. Since the available benefits listed in the instrument (Item #27, P.8) were not read to any of the respondents before answering items 19 (dependent variable 1)and/or 25 (dependent variable 2).
- 3. <u>Aided Propensity</u>.--Prompted inclination expressed by an individual to join the military during an eighteen month period after graduating from high school. The 11 benefits (Item #27, p.

- 8) were individually read to each respondent prior to asking about joining the military service (Item #28, p.8, dependent variable 3).
- 4. <u>Dependent Variables.</u>—The dependent variables were based on the three successive decision points in the instrument, i.e., Item 19, P.4 (unaided propensity); Item 25, p. 7 (unaided propensity); and item 28, p.8 (aided propensity). All of the dependent variables were nominal (categorical) in nature.
- 5. <u>Independent Variables</u>.--All items in the instrument, except items 19, 25, and 28, are treated as independent variables.
- 6. <u>Groups.</u>—Three groups were defined who correspond to the three dependent variables: Group I, unaided propensity (N=32); Group II, unaided propensity (N=72); and Group III, aided propensity (N=183).
- 7. <u>Socioeconomic Status (SES)</u>.--The school catchment area of four senior high schools was used to estimate the respondents socioeconomic status (SES). Anacostia High School (AHS) and Ballou High School (BHS) respondents were treated as low SES; Coolidge High School (CHS) respondents were treated as low middle SES; and Wilson High School (WHS) respondents were treated as middle and upper SES. Census tracts from each catchment area were also used to verify the various levels of SES.

Results

The instrument employed: (1) <u>telescoping</u> the decision-making process of young African Americans, (2) the assumption that the population was <u>not monolithic</u>, and (3) the use of <u>face-to-face</u> interviews. The results show a different pattern of findings for unaided and aided propensity. The complete results are presented in two parts: part 1 describes the theory and results of the logistic regression, and part 2 presents the descriptive findings based on summary statistics.

Part 1: Theory and Results of the Logistic Regression Model

The theory underlying the logistic regression model is presented in the SPSS training manual on regression. The following descriptions are excerpted from Chapter 7 of this manual.

Many situations in data analysis involve developing a prediction equation where the outcome (dependent) variable is a dichotomous one. Logistic regression is designed to use a mix of continuous and categorical predictor variables to predict a categorical outcome, or dependent variable, where the dependent variable is viewed as dichotomous; that is, it can take one of two possible values, usually coded 0 and 1....

There are two general goals when doing logistic regression:

- 1. Determine the effect of a set of variables on the probability plus the effect of individual variables;
- 2. Attain the highest predictive accuracy possible with a given set of predictors.

These two goals are not mutually incompatible, but one or the other tends to be the focus of an analysis. Those interested in theory and causal effects typically are more concerned with the first goal; those concerned with predicting whether a future event will fall in one or the other category of the dependent variable focus on the second goal. For the present study, the focus was on the second goal.

Logistic regression is a regression application applied to a dichotomous dependent variable. The linear form of the relationship does not occur in the scale of the raw data values or in the probability of the event, but instead in the log odds of the event of interest occurring. Specifically, the general equation for the logistic regression is:

Ln (Odds) =
$$\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \ldots + \beta_k X_k$$

Where the terms on the right are the standard terms for the independent variables and the intercept in a regression equation. However, on the left-hand side is the natural log of the odds, and the quantity "ln(Odds" is called a logit. It can vary from $-\infty$ to $+\infty$, thus removing the problem of predicting outside the bounds of the dependent variable. The odds are related to the probability by:

$$Odds = \frac{Prob}{1 - Prob}$$

Note that there is a linear relationship with the independent variables in logistic regression, but it is linear in the natural log of the odds and not in the original probabilities. Since we are interested in the probability of a event, i.e., the higher code in a dichotomous variable, we can combine the two equations into one equation for the probability.

$$Prob(event) = \frac{e^{\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_k X_k}}{1 + e^{\alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \dots + \beta_k X_k}}$$

This equation cannot be estimated with the least-squares method; instead, the parameters for the model are estimated using a maximum-likelihood technique. We derive coefficients that make our observed values most likely for a given set of independent variables. This was done through iteration by SPSS....

The results of the logistic regression analysis are presented in tables LR-1 to LR-6

Table: LR-1: Unaided Propensity 1: Predictive Probabilities*

	Predicted Probabilities						
Population ""	Total	Low	Low Middle				
	Group	(AHS)	(BHS)	SES (CHS)			
Respondents who will not join the military	f=394	f=116	f=107	f=99			
	99.24%	99.14%	100%	99.00%			
Respondents who will join the military	f=18	f=13	f=5	f=4			
	100.00%	100.00%	80.00%	75.00%			
Total	f=412	f=129	f=112	f=103			
	99.27%	99.2%	97.90%	98.06%			
Chi-square	139.59, 9df	81.54, 9df	23.93, 6df	26.14, 8df			
	pr < .0001	pr < .0001	pr < .0005	pr < .0001			

Table LR-2: Predictor Variables for Unaided Propensity 1 (Item #19)

Best Set of	Population	Low SES		Low Middle	
Predictor Variables		(AHS)	(BHS)	SES (CHS)	
Gender	√	· ✓	1	1	
Mother's education	· 🗸	1		1	
Enrolled in ROTC	1	1	✓	✓	
Friends serving in the military	1	√		✓	
Talked with recruiter	✓	✓		✓	
Educational benefits after service	1	✓	1	✓	
Education benefits while in service	1	1		1	
Travel and adventure	1	✓	1	1	
Escape from community	1	1			
Good will: Army viewed as an equal opportunity employer		✓	1		

^{*} Outliers were excluded from the analyses.

** Wilson High School was not included in the analysis because the numbers were extremely small.

Table: LR-3: Unaided Propensity 2: Predictive Probabilities*

	Predicted Probabilities						
Population **	Total	Low	Low Middle				
	Group	(AHS)	(BHS)	SES (CHS)			
Respondents who will not join the military	f=234	f=84	f=79	f=80			
	97.01%	96.43%	97.47%	96.25%			
Respondents who will join the military	f=39	f=10	f=9	f=15			
	79.49%	80.00%	100.00%	73.33%			
Total	f=273	f=94	f=88	f=95			
	94.51%	94.68%	97.73%	92.63%			
Chi-square	169.33 9df	45.10, 6df	51.50, 4df	54.06, 7df			
	pr < .0001	pr < .0001	pr < .0001	pr < .0001			

Table LR-4: Predictor Variables for Unaided Propensity 2 (Item #25)

Best Set of	Population	Low SES		Low Middle	
Predictor Variables		(AHS)	(BHS)	SES (CHS)	
Gender	✓			1	
Mother's education	1				
Enrolled in ROTC	1	✓		1	
Friends serving in the military	1	✓		1	
Educational benefits after service	✓	✓	1	1	
Education benefits while in service	✓	✓	1	J	
Travel and adventure	1	✓	1	1	
Best subject in school			1		
Pay and Benefits	1	✓			

^{*}Outliers and Group 1 respondents were excluded from the analyses.

**Wilson High School was not included in the analysis because the numbers were extremely small.

Good will: Army viewed as an	✓		1
equal opportunity employer			

Table: LR-5: Aided Propensity 3: Predictive Probabilities*

	Predicted Probabilities						
Population "	Total	Low	Low Middle				
	Group	(AHS)	(BHS)	SES (CHS)			
Respondents who will not join the military	f=36	f=8	f=19	f=11			
	58.33%	87.50%	89.47%	81.82%			
Respondents who will join the military	f=158	f=63	f=39	f=53			
	96.20%	100.00%	94.87%	98.11%			
Total	f=194	f=71	f=58	f=64			
	89.18%	98.59%	93,10%	95.31%			
Chi-square	87.49, 6df	47.22, 7df	52.22, 7df	47.95, 7df			
	pr < .0001	pr < .0001	pr < .0001	pr < .0001			

^{*}Outliers and Groups 1 and 2 respondents were excluded from the analyses.
**Wilson High School was not included in the analysis because the numbers were extremely small.

Table LR-6: Predictor Variables for Aided Propensity 3 (Item #28)

Best Set of	Population	Low	Low SES		
Predictor Variables		(AHS)	(BHS)	SES (CHS)	
Gender	1			✓	
Age	. 🗸	1			
Grade		✓	1		
Best subject in school		✓	√	1	
Enrolled in ROTC				/	
Relatives in service		1			
Friends serving in the military				1	
Talked with recruiter				1	
Educational benefits after service: up to \$30,000 in college expenses	1	1	1	1	
Educational benefits while in service: take courses & earn credits	1	1	1		
Free medical and dental insurance	1		1		
Paid vacation each year		1	1		
Free travel anywhere	1		√		
Good will: Army viewed as an equal opportunity employer				1	

Some general conclusions based on the logistic regression analysis are:

- 1. African American propensity to enlist in the military can be predicted with a probability ranging from .90 to 1.00, at several decision points when SES is taken into account.
- 2. The most important predictor is the education benefit after service. This predictor was consistently present across all three groups and across all SES levels. Other benefits associated with military service, such as travel and adventure, are important predictors, but their actual weights could not be clearly determined for all groups.
- 3. The presence of a "well functioning" ROTC makes a difference, as illustrated by its

- value as a predictor at Coolidge High School (CHS) for all three groups. However, at Anacostia High School (AHS), the ROTC was not an important predictor variable.
- 4. Our idea of "Latent good will" proved to be an important predictor for low SES population in the first decision, and it was important for low-middle SES at the second and third decision points.
- 5. The TV advertisements did <u>not</u> appear as a predictor variable for any SES group at any of the three decision points.

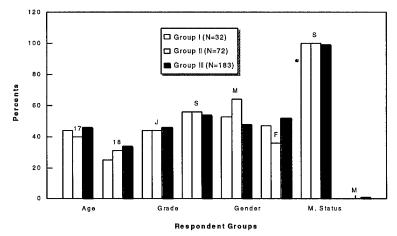
Part 2: Descriptive Findings Derived from Summary Statistics

The study was carried out with a total sample of 460 respondents. However, there were four decision points at which the interview would be terminated. These points were: (1) enlistment in the military as the first choice (unaided propensity); (2) determination to pursue the first choice stated, usually college; (3) joining the military if unsuccessful with the first choice (also unaided propensity); and (4) joining the military if unsuccessful with both the first and second choices and where the benefits of joining the military were made known to them (aided propensity). These decision points were used to define operationally the three groups used in this study. Group I (N=32) is composed of those students whose first choice (unaided propensity) was either to enlist in the military or to join ROTC while attending college. Group II (N=72) is composed of those respondents who will enlist in the military if their first choice, usually college, does not work out. This second choice also was unaided propensity.

Group III (N=183) consists of those respondents who will enlist in the military if their first and second choices do not work out and after being informed of the benefits that the military offers. The sub-samples (Groups I, II and III) do not add up to 460 cases because, out of the total sample of 460, there are 57 respondents who expressed a determination to stay with their first choices, other than the military. These respondents have been excluded from any of three groups.

Table 1. Demographic characteristics of three respondent groups

Respondent Group	Age	(%)	Grad	e (%)	Gend	er (%)	Marita tus (
75 145 150 150 150 150 150 150 150 150 150 15	17	18	J	S	M	F	S	M
Group I (N = 32)	44	25	44	56	53	47	100	0
Group II (N = 72)	40	31	44	56	64	36	100	0
Group III (N = 183)	46	34	46	54	48	52	99.4	0



J = Junior
S = Senior
M = Male
F = Female
S = Single
M = Married in
M. Status

Figure 1. Demographic Characteristics of Three Respondent Groups

<u>Findings and Discussion for Table 1 and Figure 1</u>.--For Groups I and III, the respondents were almost equally divided by gender, and virtually all of them were single. However, for all three groups, gender does not seem to have any real effect on those who selected military as an option after high school. In addition, the lack of marital obligations suggests that these respondents are an appropriate group

for recruitment activities.

Table 2. Socioeconomic status (SES) of respondents by senior high school attended

Respondent Group	Low (%) Anacostia and Ballou	Lower-Middle (%) Coolidge	Middle (%) Wilson
Group I (N = 32)	77	18	3
Group II $(N = 72)$	62	26	12
Group III (N = 183)	56	31	11

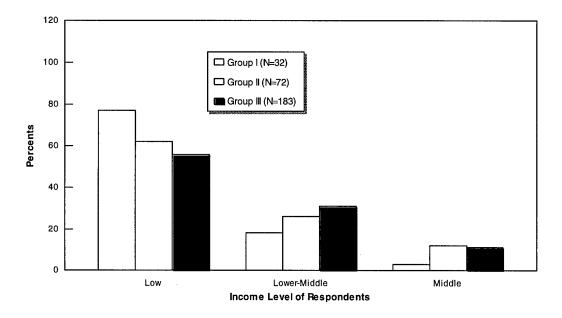


Figure 2. Socioeconomic Status of Three Respondent Groups

Findings and Discussion for Table 2 and Figure 2.—For each of the three groups, almost two-thirds of the students who will join the military at any one of the three decision points come from the lower socioeconomic status as defined for this study. The number of middle socioeconomic status students who are likely to enlist in the military, even as a third choice when the benefits are clearly understood, is very small. These middle and lower-middle socioeconomic status students apparently believe that

they still have other more desirable choices open to them than enlisting in a military service even after being "unsuccessful" in terms of their first two choices.

Table 3. Shifts in decision-making as a function of respondents applying "reality checks" to their post high school preferences

Sample		Unaided Propensity			Aided Propensity		
	Choice 1	ce 1 (Item 19) Choice 2 (when Choice I does not work out)		not Choices 1 &			
	f	%	f	%	f	%	
N = 460	32	7					
N = 372			72	19			
N = 300				• • •	183	61	

Findings and Discussion for Table 3.—The Choice 1 findings in this study parallel those of other studies. Where the present study differs from these earlier studies is in Choices 2 and 3. These choices show the telescoping effect in decision-making. By telescoping effect is meant simulating in ten minutes a lapse time of up to 24 months after high school graduation. That is, the results show that up to 61% of this particular sample is likely to join the military if the approaches used for recruiting them take the telescoping effect into account and appropriately space the recruiting efforts. This spacing of recruiting efforts implies the need to shift such efforts to other venues, such as community and business colleges and universities, minority universities (where the attrition rates are high), unemployment offices, recreational facilities, etc. To our knowledge, this study represents the first time that a simulation has been used for the decision-making process to show that the declining enlistment propensity attributed to African Americans in previous studies is likely to be an "artifact".

Table 4. Absence of spontaneous negative responses (LGP) regarding the military as the first-choice occupation for Groups I - III (unsolicited responses)

Key elements of latent goodwill (LGW)	All Groups (N = 460) (%)
Friends' negative attitudes	1
Personal negative attitudes	9
Racial discrimination in promotion and training opportunities	1
Racial discrimination in combat assignments	0
Relatives' negative attitudes	1
Other Negative Influences	1

Findings and Discussion for Table 4.—The items in Table 4 show that the entire sample (N=460) did not spontaneously verbalize the possible negative responses shown in Matrix 1 as reasons for not joining the military when asked for their first career preference after graduating from high school. The fact that virtually no respondent said anything that would fit with these items suggests a pervasive or latent goodwill toward the military. A similar pattern emerges when the remaining respondents were directly asked about the Army as an Equal Opportunity Employer (EOE). Some of the respondents do not understand the term EOE, but when this is translated by the interviewers to mean that the Army does not discriminate, the respondents agree. The combination of items provide a consistency check on the respondents' perceptions.

Table 5. Living arrangements for three respondent groups

Respondent Group	Living Arrangements (%)				
	Parents	Mother	Father	Other	
Group I (N = 32)	28	38	6	28	
Group II (N = 72)	42	32	11	15	
Group III (N = 183)	37	41	4	18	

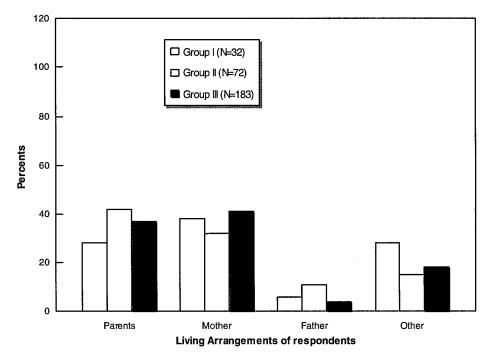


Figure 3. Living Arrangement for Three Respondent Groups

<u>Findings and Discussion for Table 5 and Figure 3.</u>—Approximately one-third of the respondents live with their mothers, another one-third with both parents, and the remainder typically live with a mix of relatives, such as a grandmother or an older brother or sister. Any recruiting strategy probably should take into account that mothers and other female relatives, often grandmother, are likely to be influential in any decision about enlistment of these young people in the military.

Table 5A. Living Arrangements of Groups I, II & III by SES¹

SES	Group I (%)		Group I (%) Group II (%)			o)	Group III (%)		
	Parent	Mother	Father	Parent	Mother	Father	Parent	Mother	Father
Low	25	25	56	18	26	7	19	26	3
Low/Middle	3	12	0	15	4	3	11	11	.5
Middle	0	0	0	8	1	1	6	4	.5

¹ Percents do not add up to 100% because not all of the living arrangements have been included.

<u>Findings and Discussion for Table 5A</u>.--More than one-fourth of these students in the lower SES live with their mothers, and .rom 50-60% of these respondents come from low income neighborhoods, This finding suggests that an increasing number of mothers of these students are likely to be influential in the decision-making process with regard to enlistment of their children.

Table 6. Parents' education for three respondent groups 1,2

Respondent Group	Mother's Education (%)			Father's Education (%)			%)	
	LHS	HS	SC	C	LHS	HS	SC	С
Group I (N = 32)	9	34	25	9	13	41	25	6
Group II (N = 72)	11	38	28	8	16	33	17	11
Group III (N = 183)	11	43	25	12	14	42	16	11

¹ The following codes are used for educational level

LHS = Less than a high school degree

HS = High school degree or GED

SC = Some college

C = College degree

Findings and Discussion for Table 6.—The education levels of the fathers and mothers are almost the same. Parents' education does not appear to be a predictor variable for any of the three groups.

² The percents for the educational levels do not add up to 100% because of the other educational levels reported which have very few responses.

Table 7. Participation in ROTC of three respondent groups

Respondent Group	Particip ROT	C(%)
Group I (N = 32)	Yes 56	No 44
Group II (N = 72)	14	86
Group III (N = 183)	10	90

<u>Findings and Discussion for Table 7.</u>.--Those respondents who select the military as their first choice also had a much greater participation in ROTC than did the respondents who chose the military as either their second or third choice. Recruiters should not rely on ROTC in high schools as the main source of enlistees. Minority institutions, like UDC and the community colleges, where the college attrition rates are high, and there is a large pool of potential enlistees, can be viewed as recruitment sites. Also, unemployment offices, recreational facilities and shopping malls are probably suitable as recruitment sites as well.

Table 8. Respondents with relatives in the military.

Respondent Group	Rela	atives served	(%)	Relat	ives servin	g (%)
	Yes	No	NS ¹	Yes	No	NS ¹
Group I (N = 32)	75	25	0	56	31	6
Group II $(N = 71)$	80	20	0	45	52	3
Group III (N = 182)	78	21	0	26	70	4

 $^{^{1}}$ NS = Not Sure

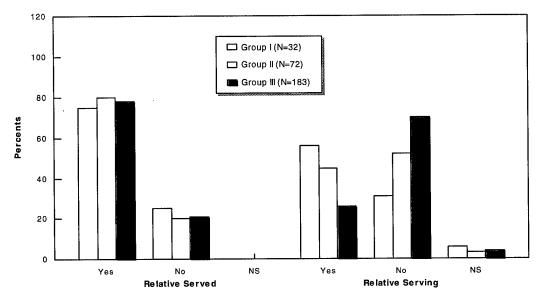


Figure 4. Respondents with Relatives in the Military

Findings and Discussion for Table 8 and Figure 4..-Individuals who are currently serving in a military service are not likely to be as effective potential recruiters as those who have served in the military and now have returned to the community. The lower percents for relatives currently serving are probably more a function of the lack of knowledge on the part of the respondents than a decline in actual enlistments for their relatives. Groups I, II and III are almost identical in terms of percents of relatives who have been in a military service. However, Group I has a greater percent of relatives currently serving than either Groups II or III. Group III has the lowest percent.

Table 9. Respondents' relationship to family member(s) in the military¹

Respondent Group	Relatives served (%)					
	Mother	Father	Male Rela- tives	Female Relatives		
Group I ²	0	13	75	13		
Group II ³	2	19	74	5		
Group III ⁴	1	26	69	3		

Table 9-A. Respondents' relationship to family member(s) in the military¹

Respondent Group		Relatives s	erving (%)	
	Mother	Father	Male Rela- tives	Female Relatives
Group I ²	0	6	72	22
Group II ³	0	9	84	6
Group III ⁴	0	8	88	4

¹ Numbers in each group vary because of missing cases for this item

<u>Findings and Discussion for Tables 9 and 9-A.</u>—Almost 100% of the three groups of respondents have relatives who either have served or are serving in the military, and the vast majority of them are males. Currently, Group I has shown a larger percentage of female relatives involved with military than is the case with the other two groups. It is likely that the numbers of females will increase in the future. No respondent has reported that both of his/her parents had served or are currently serving in the military.

² For Group I, N=24 for relatives served; N=18 for relatives serving

³ For Group II, N=57 for relatives served; N=26 for relatives serving

⁴ For Group III, N=140 for relatives served; N=48 for relatives serving

Table 10. Respondents' seeing and reacting to military advertisements

Respondent Group		recruiting (%)		caught on (%) ¹
	Yes	No	Yes	No
Group I ²	94	6	66	33
Group II ³	99	1	67	33
Group III ⁴	94	6	53	47

¹ Any respondent who did not see the advertisements was not asked this question

Findings and Discussion for Table 10.--Virtually all of the respondents (N=460) report seeing the recruitment ads for the military when directly questioned about them. In addition, more than two-thirds of the respondents, again when directly questioned, note that the ads had caught their attention. These findings are in marked contrast to the findings about the impact of ads in Matrix 1, where all of the respondents had the opportunity spontaneously to mention the influence of the ads in either a positive or a negative way. However, in Matrix 1, 99% of the respondents did not spontaneously mention the media or the ads as having any impact on their decision-making for either enlisting or not enlisting in the military.

² For Group I, N = 32 for seeing the ads; N = 30 for catching attention

³ For Group I, N = 72 for seeing the ads; N = 70 for catching attention

⁴ For Group I, N = 183 for seeing the ads; N = 172 for catching attention

Table 11. Unsolicited reasons for selecting the military as the respondents' first choice of occupation¹ (Matrix 1)

Key elements for unaided propensity	Group I (N = 32) (%)
Discipline and self-esteem	18
Education benefits after service	28
Education benefits while in service	37
Officer Candidate School	21
Pay and benefits	18
Relatives' positive attitudes	40
Travel/adventure	31

Table 12. Unsolicited reasons for enlisting in the military as a second choice of occupation for Group II¹ (Matrix 2)

second choice of occupation for Groc	P II (MIGHTIN Z)
Elements of unaided propensity	Group II (N = 72) (%)
Discipline and self-esteem	15
2. Education benefits after service	18
3. Education benefits while in service	30
4. Pay and benefits	14
5. Relatives' positive attitudes	14
6. Travel/adventure	19

¹ Items with less then 14% of the responses for either Group I or Group II are not shown in these tables. However, the entire response distributions for Matrix 1 and Matrix 2 are shown in Appendix B.

Findings and Discussion for Table 11 and 12.—For Groups I and II, one major theme, educational benefits, emerges from Tables 11 and 12 which deals with the spontaneous (unsolicited) reasons for joining the military. More specifically, educational benefits, both while in service and after leaving the service, are the most critical elements in the decision-making process of these two groups of respondents. In addition, for Group I, relatives' positive attitudes are an important factor in making the choices, followed by Travel/Adventure (44%).

Table 13. Reasons for enlisting in the military based on a knowledge of the benefits (elements of aided propensity) as a third choice for Group III

Elements of Aided Propensity	Group III (N = 183) (%)
1. Up to 30,000 for college expenses	78
2. Take courses and earn college credits while in service	44
3. Receive college credits for skill training while in service	38
4. Get paid while learning a foreign language	30
5. Get paid while learning a new job	58
6. Get paid while enjoying an exciting job	49
7. Receive 30 days of paid vacation each year	58
8. Receive free medical and dental insurance	67
9. Receive free housing or a housing allowance	60
10. Get free travel to anywhere in the world	71
11. Push myself to my limits be combat-ready	13

<u>Findings and Discussion for Table 13</u>.--Table 13 depicts the last phase of the telescoping process in the decision-making process of the respondents. That is, Choices I and II have not worked out and now someone the respondent trusts (the interviewer by this time) orally explains to the respondents all of the benefits that the military services offer. After engaging in the conversation about the benefits, the interviewer comments that only through joining a military service, like the Army, can one receive all of the benefits. The interviewer then asks which of the benefits are most attractive to the particular respondent.

The respondents' preferences for individual benefits are shown in the table for all those who said they would now consider joining a military service. As with the other two groups, the benefit selected by almost 80% of the group is the college education benefit. Almost as important are travel, free medical and dental insurance, and the free housing. The respondents were told that all of these benefits are only available through the military; they cannot be obtained any other way on the short term. As can

also be seen, all of these benefits are related to the immediate economic situation of individual respondents. In turn, the outcomes of experiencing these benefits will not only have an economic benefit, but will also improve the quality of life for these young people as well. It should be reiterated that these Group III respondents have <u>not</u> know about the available benefits. In fact, many of the respondents, upon initially hearing the benefits from the interviewers, spontaneously commented, "you gotta kidding!" Often a respondent would ask the interviewer to repeat the listing, just to make sure of them.

Table 14. Respondent attitude during interview

Ratings for Attitudes	Group I (N=32)	Group II (N=72)	Group III (N=183)
Positive	90	85	79
Interested	93	85	83
Attentive	94	87	87

Findings and Discussion for Table 14.--Upon the completion of an interview with a particular respondent, the interviewer recorded his or her impression of each respondent to the interview. The instrument used a five-point Likert scale ranging from very receptive to not receptive at all. The percents shown in the table are taken from the most receptive rating, indicating respondents' enthusiasm in participating in the interview. This receptivity is an indirect measure of the candor--and validity--of their responses.

Summary of Results and Discussion

This section presents the major findings of the research study titled, "Predicting Enlistment Propensity of Young African Americans". Predictive findings are discussed first followed by a discussion of descriptive findings.

Predictive Findings Based on Logistic Regression Statistical Model

For this study, the inclination to enlist (enlistment propensity) is measured by three items on the instrument (the three dependent variables). The first choice consisted of Item 19, "What do you think you might be doing [after high school]", and dealt with unaided propensity. Choice 2 consisted of Item 25 on the instrument, "What will you do if the first choice doesn't work out?", also unaided propensity. The third and the last choice, aided propensity, was provided by Item 28, "With these benefits waiting for you, would you consider joining a military service", in the instrument. All other items in this study were treated as potential predictor (independent) variables. Logistic regression was used because the data for the three dependent variables were nominal (in categories). The statistical results using logistic regression are shown in Tables LR-1 through LR-6.

Overall, our results show that the model can predict propensity to enlist ranging from 70 to 100% probability for individual schools depending upon the SES of the respondents as shown by school. However, for each of three dependent variables when the total group for that variable was included in the analyses, the probabilities ranged from 90 to 100% based upon the predictor variables used. For the total group at each decision point, the probabilities of the chi-squares occurring by chance were all less than .0001. However, the significance level of chi-squares for each individual school ranged from probability of <.001 to < .0001, meaning that these results occurring by chance are extremely rare. The degrees of freedom varied as well, ranging from 4 df to 9 df depending upon the number of predictor variables used.

Some general conclusions based on the logistic regression analysis are:

- 1. African American propensity to enlist in the military can be predicted with a probability ranging from .90 to 1.00, at several decision points when SES is taken into account.
- 2. The most important predictor is the education benefit after service. This predictor was consistently present across all three groups and across all SES levels. Other benefits associated with military

- service, such as travel and adventure, are important predictors, but their actual weights could not be clearly determined for all groups.
- 3. The presence of a "well functioning" ROTC makes a difference, as illustrated by its value as a predictor at Coolidge High School (CHS) for all three groups. However, at Anacostia High School (AHS), ROTC was not an important predictor variable.
- 4. Our idea of "Latent good will" proved to be an important predictor for the low SES population in the first decision, and it was important for the low-middle SES at the second and third decision points.
- 5. The TV advertisements did not appear as a predictor variable for any SES group at any of the three decision points.

Descriptive Findings

- 1. <u>Gender</u>.--For Groups I (unaided propensity) and Group III (Aided propensity), the respondents are almost equally divided by gender, and virtually all of them were single. However, for all three groups, gender does not seem to have any real effect on those who selected military as an option after high school. In addition, the lack of marital obligations suggests that these respondents are an appropriate group for recruitment activities.
- 2. <u>Socioeconomic Status</u>.--For each of the three groups, almost two-thirds of the students who will join the military at any one of the three decision points come from the lower socioeconomic status as defined for this study. The number of <u>middle socioeconomic status</u> students who are likely to enlist in the military, even as a third choice when the benefits are clearly understood, is very small. These <u>middle and lower-middle socioeconomic status</u> students apparently believe that they still have other more desirable choices open to them than enlisting in a military service even after being "unsuccessful" in terms of their first two choices.
- 3. <u>Telescoping Effect.</u>—The Choice 1 findings in this study parallel those of other earlier studies. Where the findings of the present study differ from those of earlier studies is in the findings for Choice 2 (unaided propensity) and Choice 3 (aided propensity) when the first choice does not work out. That is, the results show that up to 61% of this particular sample is likely to join the military if the approaches used for recruiting them take the telescoping effect simulated in the interview

into account and appropriately space the recruiting efforts. These choices show the telescoping effect used in the interview with regard to decision-making (by telescoping effect is meant simulating in ten minutes a lapse time of up to 24 months after high school graduation). To our knowledge, this study represents the first time that a simulation of this nature has been used for the decision-making process to show that the declining enlistment propensity attributed to African Americans is probably an "artifact".

- 4. <u>Latent Good Will</u>.--The entire sample (N=460) did not spontaneously verbalize the possible negative responses (shown in Matrix 1 of the interview schedule) as reasons for not joining the military when asked for their first career preference after graduating from high school (Choice 1). That virtually no respondent said anything that would fit with these items suggests a pervasive or latent goodwill toward the military. A similar pattern emerged when the respondents were directly asked about the Army as an Equal Opportunity Employer (EOE). Some of the respondents did not understand the term EOE, but when this was translated by the interviewers to mean that the Army does not discriminate, the respondents agreed. The combination of items also provided a consistency check on the respondents' perceptions.
- 5. <u>Personal Living Arrangements</u>.--Approximately one-third of the respondents live with their mothers, another one-third with both parents, and the remainder typically live with a mix of relatives, such as a grandmother or an older brother or sister.
- 6. <u>Education of Parents</u>.--The education levels of the fathers and mothers are almost the same. Parents' education does not appear to be a predictor variable for any of the three groups.
- 7. <u>Participation in ROTC</u>.--Those respondents who select the military as their first choice also had a much greater participation in ROTC than did the respondents who chose the military as either their second or third choices.
- 8. <u>Relatives with Military Service</u>.--Groups I, II and III are almost identical in terms of percents of relatives who have been in a military service. However, Group I has a greater percent of relatives currently serving than either Groups II or III. Group III has the lowest percent.
- 9. <u>Relatives who have served and relatives serving</u>.--Almost 100% of the three groups of respondents have relatives who either have served or are serving in the military; the vast majority of whom are males. Group I has shown a larger percentage of female relatives involved with military

than is the case with the other two groups. It is likely that the numbers of females will increase in the future for the other two groups. No respondent has reported that both of his/her parents had served or are currently serving in the military.

- 10. <u>Reaction to Military Advertisements</u>.--Virtually all of the respondents (N=460) reported seeing the recruitment ads for the military when directly questioned about them. In addition, more than two-thirds of the respondents, again when directly questioned, noted that the ads had caught their attention. These findings are in marked contrast to the findings about the impact of ads in Matrix 1, where all of the respondents had the opportunity spontaneously to mention the influence of the ads in either a positive or a negative way. However, in Matrix 1, 99% of the respondents did not spontaneously mention the media or the ads as having any impact on their decision-making for either enlisting or not enlisting in the military.
- 11. <u>Unsolicited reasons for selecting the military as first or second choice</u>.—For Groups I and II, one major theme, educational benefits, emerges (Tables 11 and 12) from the spontaneous (unsolicited) reasons for joining the military. More specifically, educational benefits, both while in service and after leaving the service, are the most critical elements in the decision-making process of these two groups of respondents. In addition, for Group I, relatives' positive attitudes are an important factor in making the choice, followed by Travel/Adventure.
- 12. <u>Aided Propensity</u>.—Table 13 depicts the last phase of the telescoping process in the decision-making process of the respondents. That is, Choices I and II have not worked out and now someone the respondent trusts (the interviewer by this time) orally explains to the respondents all of the benefits that the military services offer. After engaging in the conversation about the benefits, the interviewer comments that only through joining a military service, like the Army, can one receive all of the benefits. The interviewer then asks which of the benefits are most attractive to the particular respondent.

As with the other two groups, the benefit selected by almost 80% of Group III is the college education benefit. Almost as important were travel, free medical and dental insurance, and the free housing. The respondents were told that all of these benefits are only available through the military; they cannot be obtained any other way on the short term. As can also be seen, all of these benefits are related to the immediate economic situation of individual respondents, and in the long

term, to improving their life opportunities. It should be reiterated that these Group III respondents do <u>not</u> know about the available benefits. In fact, many of the respondents, upon initially hearing about the benefits from the interviewers, spontaneously commented, "you gotta be kidding!" Often a respondent asked the interviewer to repeat the listing, just to make sure of them.

13. <u>Respondent Attitude</u>.—Upon the completion of an interview with a particular respondent, the interviewer recorded his or her impression of each respondent to the interview. The instrument used a five-point Likert scale ranging from very receptive to not receptive at all. The percents shown in the table are taken from the most receptive rating, indicating respondents' enthusiasm in participating in the interview. This receptivity is an indirect measure of the candor—and validity—of their responses.

Recommendations

Based on the findings and discussion earlier in this report, the following recommendations are made:

- 1. **Promising target population for recruitment by the military.**—The most promising groups of young African Americans for enlisting in the military service are from the lower SES. The military needs to recognize that this pool of young people is likely to be the largest source of recruits. That is, the military needs to accept this reality, recruit them with whatever skills they have, and modify their behavior after they have enlisted. This point was made by Army Secretary Louis Caldera on February 17, 1999 almost a year after our second year report was submitted.
- 2. **Potential recruiters.**—The military should make a concerted effort to expand the pool of recruiters to include: (1) relatives who have served in the military and who now are living in the community, and (2) high school counselors and other relevant school personnel in the lower SES areas. In the case of counselors and other school personnel, they need to be trained in:
 - 2.1. the comparative benefits of all viable options after high school graduation for graduating high school seniors
 - 2.2. all of the benefits that are waiting for the graduates as a result of enlistment in a military service. At the present time, the counselors, in particular, are only focusing on college or some other postsecondary education option.

For this training of counselors to be successful, a team with knowledge of the school system, the target population, the personnel involved and actual teaching experience with this

population will be absolutely essential.

In the case of veterans now living in the community, extensive training may not be necessary. Only short seminars may be needed where their importance to the whole recruitment process both during high school years and after graduation from high school will be discussed.

- 3. **Recruitment locations by time frame.-**-The military should expand its recruitment to include locations where students and recent high school graduates congregate:
 - 3.1. Recreation centers
 - 3.2. Unemployment offices
 - 3.3. Public minority institutions with open enrollment policies and community colleges

 These locations are recommended because a large number of lower SES students can
 be found at them. Also, for these young people, the decision-making for the future is often
 indefinite, and they congregate at these places for mutual support.
- 4. **Women's role in the Army**.--In all three groups, women were almost equally represented in the sample. Based on our general knowledge of this population as well as the results of the present study, an in-depth study of women in this population should be carried out to investigate the possible approaches that the Army can use to attract these women to enlist in the service.
- 5. **Advertising material.**—At least some of the advertising brochures should be rewritten to address the reality of this population. Written presentations and sentence structures designed for the middle class will not communicate the benefits that can happen from enlisting in a military service to a population that essentially secures its information in short sound bytes. In addition, a new theme for the Army slogan should be considered that emphasizes economic and educational benefits in the short term and improving one's own life opportunities in the long term.
- 6. **Survey research techniques**.--Modifications in standard survey research techniques, such as the ones used in this study, are required to produce valid and reliable results for this population.